

THE STANFORD EXPEDITION TO BRAZIL, 1911.

J. C. BRANNER, *Director*.THE PHYTOPHAGA (EXCEPT CASSIDÆ AND HISPIDÆ)
OF THE STANFORD EXPEDITION TO BRAZIL.

BY FRED C. BOWDITCH.

Through the kindness of Mr. Wm. M. Mann the Phytophaga as above, taken by the Stanford Expedition, have been placed in my hands for identification, the localities are stated in detail on page 72 in Mr. Wolcott's paper on the Cleridæ. The collection is unfortunately small numerically in comparison with the number of species represented, but contains some interesting forms. The types and certain other specimens are in my collection. The numbers (in parenthesis) after some of the species are those affixed by Prof. R. Thaxter in his researches for Laboulbeniaceæ.

In addition to the species given below there are a few undetermined forms.

<i>Lema sagittifera</i> Lac.	Natal	1
<i>gracilis</i> Lac. (2212)	Pará, Independencia	2 (2212) Ceará-Mirim
<i>orbigny</i> Lac.	Maranguape Mts.	3
<i>teniata</i> Bates	"	1
<i>historionica</i> Lac.	Independencia	2
<i>Megascelis lacertina</i> Lac.	"	5
near <i>virgo</i> Lac.	Independencia	1
near <i>viripidallens</i> Clk.	Rio Madeira	1
<i>Pseudochlamys megalostomoides</i> Lac.	Natal	1 ♂
<i>Chlamys hispidula</i> Klug.	Porto Velho	1
<i>Anomæa humerigera</i> Lac.	Rio Madeira	1
<i>Pachybrachys contortus</i> Baly	{ Ceará	1
	{ Maranguape Mts.	1
sp.	Natal	12
sp.	Independencia	3
sp.	"	1
sp.	"	1
<i>Scolochrus fallax</i> Moritz	"	2
<i>Monachus gemellus</i> Suff.	{ "	8
	{ Ceará	2
near <i>contractus</i> Boh.	Ceará	1
near <i>contractus</i> Boh.	Independencia	1
<i>Dachrys pusillus</i> Lac. ?	"	1

<i>Megalostomis luctuosa</i> Lac.	Porto Velho	1
<i>Proctophana tomentosa</i> Lac.	Ceará	1
<i>Lamprosphaerus near hebe</i> Baly	Independência	2
<i>janthinus</i> Lef.	"	1
sp.	Rio Madeira	2
<i>Habrophora</i> sp. ?	"	1
<i>Colaspoides fulgurans</i> Lef.	Porto Velho	1
<i>Colaspis æruginosa</i> Lef.	Rio Madeira	11
14-costata Lef.	Natal	1
<i>strigosa</i> Lef.	Rio Madeira	1
<i>suturalis</i> Lef.	Ceará	1
<i>inconspicua</i> Jac.	Independência, Ceará, Natal	8
<i>cribricollis</i> Lef. ?	"	8
<i>Podoxenus iripennis</i> Bow. nov. sp.	Rio Madeira	1
<i>limbatus</i> Lef.	Maranguape Mts.	1
<i>Metaxonychia pulchella</i> Baly	Rio Madeira	1
<i>Agbalus strigatus</i> Lef.	"	2
<i>Corysthæa cribrata</i> Lef.	Independência-Ceará	2
<i>Nodostoma fraterna</i> Lef.	" -Manaos	2
<i>Chalcophana hilaris</i> Germ.	Manaos	2
<i>Nodonota</i> sp. ?	Itacoatiara	1
<i>Paria boggiani</i> Jac. ?	Ceará	1
<i>Typophorus versutus</i> Lef.	Independência-Ceará. Baturité Mts.	
<i>annulatus</i> Lef.	Maranguape Mts.	
<i>Myochrous tibialis</i> Jac.	Independência	1
<i>Bohemanni</i> Lef.	Baturité Mts.	2
<i>Biorus femoralis</i> Lef.	Ceará	2
<i>Eumolpus surinamensis</i> Fab.	Rio Madeira	1
<i>Doryphora Fabricii</i> Guér.	"	-Para
12-guttata Fabr.	"	1
<i>Calomera cayanensis</i> Fabr.	Porto Velho	2
<i>Dircema septum</i> Erich.	Rio Madeira	2
<i>nigripenne</i> Fabr.	"	-Manaos-Porto Velho
<i>Galerucella</i> sp.	Manaos	3
<i>Monocesta nigricornis</i> Clk.	Manaos	5
<i>Cerotana congener</i> Baly	"	2 (2221)
<i>creavata</i> Baly	Rio Madeira	-Porto Velho
<i>xanthopus</i> Perty	"	2
sp. ?	"	1
<i>arcuata</i> Oliv.	"	1 ♀
<i>Neobrotica 6-plagiata</i> Jac.	Independência	1
<i>brasiliensis</i> Bow. sp. nov.	"	4
<i>Diabrotica tarsata</i> Gahan	Rio Madeira	1
<i>atromaculata</i> Baly	Rio Madeira	1
	"	2

* <i>kirbyi</i> Baly	Independencia-Ceará	3
, <i>significata</i> Gahan	"	(many)
* <i>speciosa</i> Germ.	"	Baturité Mts.
* <i>rufolimbata</i> Baly	"	2
, <i>confraterna</i> Baly	Rio Madeira	1
* <i>scdata</i> Baly ?	Independencia	2
, <i>proximans</i> Baly	Manaos	1
* <i>virittula</i> Kirsch	Independencia-Para	4
, <i>perplexa</i> Baly	"	-Baturité Mts. 2
, <i>zclota</i> Gahan	Pará	1
* <i>Pascæi</i> Baly	Ceará	1
, <i>Luperus</i> near <i>subglabrata</i> Jac.	Rio Madeira	1
* <i>Luperodes</i> sp.	Porto Velho (2220)	2
	Rio Madeira	1
* <i>Hermaophaga</i> near <i>parrula</i> Jac.	Rio Madeira	-Independencia 2
, near <i>teapensis</i> Jac.	Natal	6
, <i>Systema</i> near <i>margenalis</i> Ill.	Independencia	1
, <i>Notozona balyi</i> Jac.	Rio Madeira	1
* <i>Trichaltica nigripennis</i> Bow. n. sp.	Ceará	5
* <i>Disonycha glabrata</i> Fab.	Rio Madeira-Porto Velho	9
, <i>amazonica</i> Jac.	"	1
, <i>Sparnus</i> sp.	Rio Madeira	1
, <i>Lactrica citrina</i> Har.	Independencia	1
, near <i>femorata</i> Jac.	Porto Velho	2 (2239)
, <i>sellata</i> Baly ?	Rio Madeira	1
, <i>weisei</i> Jac.		1
* sp.	Porto Velho	8
* sp.	" "	4 (2219)
* sp.	" "	1 (2211 - 2212)
* <i>Homophyla adusta</i> Har.	Rio Madeira	1
, <i>nigrita</i> Duv.	Independencia	3
, <i>variabilis</i> Jac. ?	Rio Madeira	2
* sp.	Ceará	1
, <i>Homophata recticollis</i> Baly	Rio Madeira	2
, <i>abbreviata</i> Ol.	"	1
, <i>biteniata</i> Jac.	Manaos	6
, <i>aquinoctialis</i> Linn.	Independencia, Porto Velho, Para	4 (2213 Para)
* <i>6-notata</i> Har.	Manaos	1
, <i>annularis</i> Ill.	Rio Madeira	1
* <i>Monoplatus</i> ?	Baturité Mts.	15
* <i>Asphara elegantissima</i> Schf.	Rio Madeira	2 (2218)
, <i>abbreviata</i> Fabr.	"	1 (2217)
, <i>4-maculata</i> Clark (var.?)	"	1
, <i>siebersii</i> Ill.	Pará	2 (2234)
, <i>fulcrata</i> Erich.	Independencia	1

<i>Edionychis amazona</i> Bow. (<i>inconspicua</i> Jac.)	Rio Madeira	1
<i>bakeri</i> Bow. nov. sp.	Manaos	1
<i>bifasciata</i> Baly	Rio Madeira	3
<i>branneri</i> Bow. sp. nov.	"	1
<i>12-notata</i> Jac.	"	1
<i>ingrata</i> Jac.	Independencia	1
<i>interrupto-rivata</i>	Independencia	1
<i>manni</i> Bow. nov. sp.	Rio Madeira	1
<i>rufina</i> Ill.	Pará	1
<i>scissa</i> Germ. var.	{ Independencia	1
	{ Maranguape Mts.	1
<i>turpis</i> Jac.	Porto Velho	1 (2240)
<i>zebrata</i> Ill.	Independencia	1
<i>suffusa</i> Bow. sp. nov.	Rio Madeira	1
<i>dipus</i> Ill.	Pará	3

Podoxenus iripennis sp. nov.

Yellow, fulvous; mandibles, eyes, tarsi, upper half of 5 joint and joints 6, 7, and 9-10-11 of antennæ black, thorax margined, strongly angulate at middle, elytra suffused with cyaneous, except at posterior third.

Type 1 ♀ Rio Madeira

length $6\frac{1}{2}$ mm.

Head shiny impunctate, except between the eyes where a deep transverse fovea shows a few punctures, labrum large almost square, epistome broadly emarginate, vertex convex, thorax about half wider than long, strongly margined on the sides, which are regularly and sharply angulate at the middle, anterior angle sharp and prominent, surface shiny, coarsely and irregularly punctate, more crowded and semi confluent at the sides, elytra with a moderate subbasal depression, the surface thickly, rather coarsely punctured on the disk and behind and having a decided tendency to a geminate arrangement, the rows as usual becoming single towards the apex which is strongly costate, the costæ being continued as obsolete smooth lines for some distance forward, the cyaneous coloring avoids the sutural and lateral edges as well as the apex and shows only as a faint coppery reflection, body beneath entirely pale, except for the dark tarsi and the extreme tips of middle and posterior tibiae.

The coloring of the elytra, the evenly angulate thorax and the sharply colored antennæ will help to separate this form.

Neobrotica brasiliensis sp. nov.

Head and thorax reddish yellow with a touch of green (thorax perhaps in living specimens green) antennæ pallid, elytra pallid yellowish green, with a basal band broken into 4 spots, a wide median band dilated externally and a thick semi lunate ante apical spot brownish black, feet yellow, tibiae and tarsi brown, body below yellow with pectus brown.

1 ♀ Porto Velho

length $5\frac{1}{2}$ mm.

Antennæ yellow, apex and middle fuscous joints 3 and 4 equal, thorax with a deep transverse lunate depression not attaining the margins, scutellum dark brown, elytra semi shining, thickly punctate, the punctures arranged pretty regularly, in very close rows, the four basal spots are arranged two on either side of the suture and not touching it and two humeral, the middle band shows a tendency to run up and down the suture to join the anterior and posterior spots.

Superficially resembles my specimens of *denticornis* Jac (though not the figure in Biologia).

Trichaltica nigripennis sp. nov. Type, Ceara, Brazil, Dec. 2, 1911. USNM

Elongate, very faint bronzy black, thorax reddish yellow, feet variable from black to more or less yellowish, elytra feebly costulate with fine punctures geminate at the sides and subgeminate on the disk and single rowed behind.

Type Ceará

length $3\frac{1}{2}$ mm.

The mouth and antennæ in some examples are slightly fuscous, the punctuation of the thorax is coarse, even and quite thick and the sides anteriorly show a slight sinuation, the pubescence of the elytra is uniform grayish arranged in lines, the bronzy color shown only faintly in a strong light.

Larger than most of the described forms (except *thammi* Baly) and very like an undescribed form from Argentina in my collection.

Cedionychis bakeri sp. nov.

Testaceous, head very dark piceous, base of antennæ and apex of tibiae and tarsi piceous, body beneath black, each elytra with two short, straight black lines at the base, one humeral sublateral, the other almost median, also two small ante apical black spots placed obliquely, the outermost faint.

Type, Manaus, Brazil (1)

length 6 mm.

About the form and size of *palpalis* Jac. not much dilated and rather flattened and elongate. Head smoother with only a few punctures near the eye, frontal foveae deep, eyes comparatively close, the whole space between occupied by the foveae, frontal carina prominent between the antennæ, which are about half the length of the body, scape very dark piceous, the next two or three joints shading off to testaceous, fourth joint slightly longer than the third, mouth parts almost light testaceous, thorax smooth shining, sides broadly depressed, anterior angles scarcely notched at the side, elytra smooth polished very minutely punctulate, the basal black marks are very narrow parallel sided black lines, the outer placed on the outside edge of the humerus and parallel to the margin and extending to the median third, the inner line is almost median, parallel to the suture and the shorter of the two, the rear marks are at the beginning of the convexity, in line with the front marks, the inner a black dot, the outer a stain, apical third of the elytra sparingly ciliate. Many of the genus seem to show ciliae on the elytra to a greater or less extent though it is rarely mentioned. My specimens of *palpalis* Jac. show it.

Ædionychis manni sp. nov.

Testaceous, head and body beneath black, each elytron with two short, pointed, basal, black marks, the outer covering the humerus, the inner edge of the other touching the scutel, and two small sub-apical, obliquely placed black dots.

Type, Rio Madeira, Brazil 1

length $7\frac{1}{2}$ mm.

Again like *palpalis* Jac. and closely allied to *Bakeri* Bow. Head black with a very deep frontal foveæ, finely strigosely punctate at its upper edge and with scattered punctures except on the upper vertex which is smooth, frontal carina very marked between the antennæ, which are half as long as the body and wholly testaceous, third joint slightly shorter than the fourth thorax as in *Bakeri*, elytra the same form as the last, shiny, smooth, and very obsoletely punctulate, the basal black marks are about 1 to $1\frac{1}{2}$ mm. long, widest at the base and then gradually drawn to a fine point, the external covers the humeral umbone and the point is drawn down so as to be parallel with the lateral margin, which it nowhere attains, the inner mark touches the scutel and the pointed end is directed to the middle of the disk; the effect of this placing is that the two inner marks appear to be divergent; the feet, under side of the thorax and mesothorax are testaceous.

Ædionychis branneri sp. nov.

Testaceous white, joints 1-3 of antennæ more or less piceous, 3-10 black, thorax with front and rear edges (except the dilated lateral edge) narrowly piceous black, scutel cloudy, elytra with suture very narrowly piceous and on each side 5 piceous black spots as follows: a round dot on the humerus, a slightly larger one immediately behind, near the margin, a larger one to the right of the last and a little towards the base and equidistant between the first two and the suture a transverse bend at the middle, convex in front and barely attaining the suture, and a subquadrate ante apical spot, body beneath cloudy, legs clear testaceous.

Type, Rio Madeira, Brazil 1

length $5\frac{1}{2}$ mm.

Form that of *albipennis* Jac. Head with a transverse frontal foveæ and well marked frontal carina, surface dull and almost impunctate, antennæ a little longer than one half the body, the two apical joints markedly testaceous, thorax with broadly depressed sides and very slightly notched anterior angles, surface impunctate, elytra shiny, very obsoletely punctulate, the apex sparingly ciliate; the three first spots form a triangle of which the apex is the humerus, the middle spot is markedly convex in front, but only slightly convex behind. None of the spots attain the margin and only the extreme end of the middle spot encroaches on the suture. I place the species near *parallina* Jac.

Ædionychis suffusa sp. nov.

Head black, clypeus, labrum and mouth parts falvous, antennæ black, basal joints stained below with piceous, joints 3-4 equal, apical joint fuscous, thorax pale flavous, scutel flavous stained with piceous, elytra pale flavous, with a narrow sublateral piceous stripe, dilated at the apical end into a large ill-defined spot which does not attain either the margin or suture, thorax beneath yellow, rest of body

black, legs pale flavous, the tibiæ and tarsi more or less pale piceous and the apex of the hind femora dark.

Type, Rio Madeira 1 probably ♂ length $4\frac{1}{2}$ mm.

Head with a few small punctures near the eye, vertex smooth polished, thorax finely punctulate, sides broadly depressed, anterior angles very obsoletely notched, elytra only slightly dilated at the middle, oblong, finely and thickly punctured, the external edge of the piceous stripe is limited by the dilated margin, the internal edge is ill-defined and especially on the ante apical dilation shades gradually into the flavous ground color. The bicolored head with pale elytra and dark edge, and dark apex of the hind femora are the distinguishing features. Seems to be allied to *tabida* Jac. but is much smaller.